

ORIGINAL

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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JUN 16 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Review of the Commission's)
Rules and Policies Affecting the)
Conversion to Digital Television)

MM Docket No. 00-39

**REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

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June 16, 2000

No. of Copies rec'd 0+11
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EXECUTIVE SUMMARY

The National Association of Broadcasters (NAB) file reply comments in the Commission's review of the progress of the conversion to digital television technology. NAB focuses on two particular issues discussed in its separate initial comments: cable/DTV inter-operability and minimum receiver performance requirements.

First, because receiver manufacturers and cable have failed to produce cable/DTV inter-operability, the FCC must mandate inter-operability standards. The recent NCTA-CEA "agreements" on the labeling of "cable ready" DTV sets will only perpetuate consumer confusion and uncertainty about DTV products working together. And even this latest agreement is reported to be falling apart. Moreover, the one announced inter-operable set of DTV receiver models, Sony's IEEE-1394 digital interface-equipped receivers to be available Fall this year, has been pulled from production.

Second, the All Channel Receiver Act (ACRA) gives the Commission authority to require minimum performance standards for digital television receivers. Despite the protests of the consumer electronics industry, the *plain language* of ACRA gives the Commission authority to require that television receivers "be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting." Contrary to assertions of CEA, Philips and Thomson, the ACRA is not so narrowly tailored as to exclude new and subsequent television broadcasting channels, even those utilizing new digital technology. And the legislative intent of Congress, in seeking "maximum efficient utilization of the broadcast spectrum space" is wholly congruous with the digital transition. Broadcasters are converting to digital so that, among other things, the analog spectrum can be returned to the public for efficient utilization. Although to

date the Commission has been reluctant to mandate any type of receiver standards because it prefers to rely on marketplace forces, at this point, the Commission must conclude that such reliance on the marketplace alone has been misplaced.

NAB again calls on the Commission to take the following steps: (1) mandate interoperability standards and DTV cable must carry to allow cable consumers access to DTV signals, (2) establish DTV receiver performance standards to ensure adequate reception of DTV over-the-air, and (3) require a DTV tuner in every new television set sold (thirteen inches or larger) to jump start flagging DTV set sales.

Finally, contrary to the comments submitted by National Public Radio (NPR), the Commission should not reallocate 82-88 MHz spectrum to digital audio broadcasting. As NAB has pointed out before, this spectrum is currently occupied by TV channel 6 and the Commission should not consider reallocation of this spectrum. We remind the Commission that a DAB solution for radio broadcasters using the existing 88-108 MHz FM broadcast band has been under study for the past 10 years and is currently in the final stages of development and testing, with service roll-out expected in 2001. Thus, the need for additional DAB spectrum is unnecessary.

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Review of the Commission's)	MM Docket No. 00-39
Rules and Policies Affecting the)	
Conversion to Digital Television)	

**REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

The National Association of Broadcasters (NAB)¹ hereby files reply comments in the Commission's proceeding reviewing the progress of the DTV transition.² In addition to its separate individual comments, NAB joined in the initial comments filed by MSTV and other broadcasters and hereby supports the reply comments filed today by MSTV on many important issues raised in the *Notice*, notably the FCC's replication and principal community coverage and channel election proposals, as well as processing and mutual exclusivity issues.

NAB in these reply comments focuses on two particular issues discussed in its separate initial comments: cable/DTV inter-operability and minimum receiver performance requirements. NAB told the Commission in initial comments that "dramatic action" was needed from the FCC to re-invigorate a transition faltering for lack of necessary critical elements – which the FCC can and should require.

¹ NAB is a nonprofit incorporated association of radio and television stations and broadcasting networks. NAB serves and represents the American broadcasting industry.

² *Notice of Proposed Rulemaking*, In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39 (released March 8, 2000) [hereinafter *Notice*].

The steps NAB said the FCC must take are: (1) mandate inter-operability standards and DTV must carry to allow cable consumers to access DTV signals,³ (2) establish DTV receiver performance standards to ensure adequate reception of DTV over-the-air, and (3) require a DTV tuner in every new television set sold (thirteen inches or larger) to jump start flagging DTV set sales.

NAB here replies to consumer electronics commenters who oppose Commission mandates on receiver requirements and continue to pursue unproductive private efforts on inter-operability, despite the dearth of sales of actual DTV “receivers,” despite the total lack of cable/DTV inter-operable receivers on store shelves or in production and despite the inadequate reception characteristics of DTV receivers in the marketplace.

I. RECEIVER MANUFACTURERS AND CABLE HAVE FAILED TO PRODUCE CABLE/DTV INTER-OPERABILITY: THE FCC MUST MANDATE INTER-OPERABILITY STANDARDS.

NAB in initial comments called on the FCC to step in to mandate inter-operability standards for DTV and cable products, or otherwise secure strong manufacturer commitments for near-term provision of inter-operable products.⁴ Joint Broadcasters did the same.⁵ Thomson Consumer Electronics, Inc. (Thomson) and Philips Electronics North America Corporation (Philips) agree that inter-operability issues are important to the transition and concede that these

³ While NAB replies to commenters on other issues, there were only a few comments filed on DTV must carry because the *Notice* explicitly omitted it as an issue in this, an omnibus review of the progress of the DTV transition. *See, e.g.*, Comments of KSLs; Inc., MM Docket No. 00-39, May 17, 2000 at 5; Comments of Belo, MM Docket No. 00-39, May 17, 2000 at 4 (urging DTV must carry).

⁴ NAB Initial Comments at 12-13.

⁵ Comments of Joint Broadcasters, MM Docket No. 00-39, May 17, 2000 at 25.

issues are far from settled.⁶ Philips says that further delay could harm the transition and urges the Commission to keep the pressure on the parties.⁷ Consumer Electronics Association (CEA) acknowledged that “[t]o an unknown degree the lack of an agreement [on copy protection] already has dampened demand for DTV” and that the negative effects of no agreement (no inter-operable products, which require copy-protected links) will increase as consumers expect the use of VCRs and other connected digital devices.⁸ CEA also says the success of digital television will be negatively affected by the lack of inter-operable cable/DTV product.⁹

But, as NAB and MSTV noted in comments in the concurrent cable compatibility proceeding, the NCTA-CEA “agreements” to date on “cable ready” DTV receivers amounted to no more than incomplete agreements, unfinished standards and no commitment of products.¹⁰ And the very agreement on labeling of “cable ready” DTV sets that CEA and NCTA submitted to the Commission on May 24, 2000 and hailed as a final break-through in the NCTA-CEA private negotiations was described by NAB and MSTV in the cable compatibility proceeding as only serving to perpetuate consumer confusion and uncertainty about DTV products working together.¹¹ Now, even this incomplete agreement is reported to be falling apart.¹²

⁶ Comments of Thomson, MM Docket No. 00-39, May 17, 2000 at 20; Comments of Philips, MM Docket No. 00-39, May 17, 2000 at 19.

⁷ Comments of Philips at 19.

⁸ Comments of CEA, MM Docket No. 00-39, May 17, 2000 at 25.

⁹ *Id.*

¹⁰ See NAB and MSTV Comments in PP Docket No. 00-67, here attached as Attachment A.

¹¹ See NAB and MSTV Reply Comments in PP Docket No. 00-67, here attached in Attachment B.

¹² See attached press reports at Attachment C.

Moreover, the one announced inter-operable set of DTV receiver models, Sony's IEEE-1394 digital interface-equipped receivers to be available Fall this year, has been pulled from production.¹³

The manufacturer comments, these recent developments and the comments filed in the cable compatibility proceeding prove points NAB made in initial comments: the lack of inter-operability is hurting the DTV transition and the FCC must step in now, after years of talk promises and no inter-operability, to mandate final standards or otherwise secure firm production deadlines.

II. MANUFACTURERS' PROTESTS ASIDE, THE FCC SHOULD REQUIRE MINIMUM PERFORMANCE CAPABILITIES FOR DTV RECEIVERS.

A. The All Channel Receiver Act Gives the Commission Authority to Require Minimum Performance Standards for Digital Television Receivers.

The Commission has noted throughout the DTV proceedings that the All Channel Receiver Act (ACRA)¹⁴ "authorizes us [the FCC] to require that television receivers 'be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting.'"¹⁵ The Commission's DTV Notices have inquired whether the Commission should require various permutations of technical capabilities (*e.g.*, NTSC/ATV; NTSC/SDTV/HDTV; NTSC/SDTV; no NTSC-only; minimum performance characteristics, etc.)

¹³ See attached press reports at Attachment D.

¹⁴ 47 U.S.C. § 303(s).

¹⁵ Fifth Report and Order, 12 FCC Rcd. 12809, MM Docket No. 87-268 (April 21, 1997) at ¶107; Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry, MM Docket No. 87-268 (August 9, 1995) at ¶77 [hereinafter *Fourth Notice*]; Memorandum Opinion and Order/Third Report and Order/Third Further Notice of Proposed Rule Making, MM Docket No. 87-268 (October 16, 1992) at ¶ 81.

in television receivers once advanced television/digital television was launched.¹⁶ In asking these questions, the Commission has stated that it “believe[s] that the All Channel Receiver Act provides us with adequate authority to address these issues.”¹⁷ While the Commission has demurred from instituting receiver requirements, preferring to rely on expected marketplace incentives,¹⁸ it *has* indicated that it has authority to require particular technical performance characteristics and capabilities in new television receivers.¹⁹

The consumer electronics industry disagrees. The Consumer Electronics Association (CEA), Thomson, and Philips²⁰ all boldly and certainly proclaim that the Commission has no such authority and that the All Channel Receiver Act (ACRA) in particular conveys no such authority. NAB thinks they doth protest too much.

1. The Plain Language of ACRA Clearly Applies Here.

For the plain and certain language of the ACRA, Section 303(s) of the Communications Act of 1934, as amended, says that the Commission:

[has] authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting when such apparatus is shipped in interstate commerce, or is imported from any foreign country into the United States, for sale of resale to the public.²¹

¹⁶ See, e.g., Fourth Notice ¶ 78.

¹⁷ *Id.*

¹⁸ See, e.g., Fifth Report and Order at ¶¶ 112 – 114.

¹⁹ *Id.*

²⁰ Comments of CEA at 13-14; Comments of Thomson at 17; Comments of Philips at 15.

²¹ 47 U.S.C. § 303(s).

While Congress enacted the ACRA in 1962 to facilitate (and rescue) the deployment of new UHF technology, the *plain meaning* of the statute is not confined to analog UHF frequencies and is equally applicable to digital broadcasting. Contrary to the certain assertions of CEA, Philips and Thomson, the ACRA is not so narrowly tailored as to exclude new and subsequent television broadcasting channels, even those utilizing new digital technology.²²

The statute does not define “all frequencies” as a closed universe of NTSC VHF and UHF signals. In fact, notably absent from the statutory language is the term “UHF.” Rather, the statute speaks clearly of “all frequencies.” The Supreme Court has held that when statutory language is clear, a court “as well as the agency, must give effect to the unambiguously expressed intent of Congress.”²³ Moreover, the Supreme Court has stated that “[w]hen the words of a statute are unambiguous, then, this first canon is also the last: ‘judicial inquiry is complete.’”²⁴ In this instance, the statute is unambiguous. Congress gave the Commission authority to require that television receivers be capable of “adequately receiving all frequencies.”

2. The Legislative History Does Not Restrict ACRA’s Applicability Here.

The Supreme Court has also said that, “[h]aving concluded that the provisions of [the statute] are clear and unequivocal on their face, we find no need to resort to the legislative history of the Act.”²⁵ But even if we look beyond the *plain meaning* of the statute, the legislative

²² Most digital television channels in fact happen to be on UHF frequencies which at the time ACRA was enacted were already allocated to television broadcasting.

²³ *Chevron, USA, Inc. v. National Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984); *Atlantic Mutual Insurance Company v. Commissioner of Internal Revenue*, 523 U.S. 382, 387 [1998].

²⁴ *Connecticut National Bank v. Germain*, 503 U.S.247, 255 (1992) quoting *Rubin v. United States*, 449 U.S. 424,430 (1981); see also *United States v. Ron Pair Enterprises*, 489 U.S. 235, 241 (1981).

²⁵ *United States v. Oregon*, 366 U.S. 643, 648 (1961).

intent of Congress in passing the ACRA, is well defined: Congress was seeking “maximum efficient utilization of the broadcast spectrum space.”²⁶ This Congressional intent is wholly congruous with the digital television transition – broadcasters are converting to digital so that, among other things, the analog spectrum can be returned to the public for efficient utilization. Contrary to the CEA²⁷ and Philips²⁸ arguments, it was not Congress’ intent to expressly limit the ACRA to analog UHF reception. Were this the case, Congress could have easily crafted limiting statutory language.

We agree with Thomson that the Congress of 1962 could not have envisioned the current digital transition.²⁹ This, however, does not undermine the Commission’s authority under the ACRA to establish minimum DTV receiver performance standards. Indeed, the Supreme Court has spoken in this regard as well – a challenge to agency authority will be rebuffed in situations where Congress “[c]hoses to enact a more general statute,” with unambiguous language, and there is no “such ‘clearly expressed legislative intent to the contrary’ that would warrant a different construction.”³⁰ Here, we have both clear statutory language and a legislative record

²⁶ See S. Rep. No. 1526, 87th Cong., 2d Sess. 2 (1962).

²⁷ Comments of CEA at 13.

²⁸ Comments of Philips at 15.

²⁹ Comments of Thomson at 17.

³⁰ *National Organization for Women, Inc. v. Scheidler*, 510 U.S. 249, 261 (1994) quoting *Reves v. Ernst & Young*, 507 U.S. 170, 177 (1993), citing *United States v. Turkette*, 452 U.S. 576, 580 (1981), quoting *Consumer Product Safety Comm’n v. GTE Sylvania, Inc.* 447 U.S. 102, 108 (1980). In *National Organization for Women* the Supreme Court ruled that abortion clinics have standing to bring a RICO claim against anti-abortion organizers even though the RICO Act was enacted as a tool to combat organized crime. Thus, even though Congress did not intend the RICO Act for anti-abortion organizers, the general statutory language does not prohibit that application.

that does not reflect Congressional intent to limit the term “all frequencies” only to existing analog UHF technology.³¹

3. ACRA Applies in Today’s Circumstances.

We agree with Thomson’s statement that “[b]roadcasting has evolved considerably since the introduction of UHF television service and the passage of ACRA.”³² However, so too have the Commission’s rules under authority of ACRA evolved to keep apace of technology. Beginning in 1962, the Commission adopted technical performance thresholds so that television receivers could better acquire UHF signals.³³ And throughout the 1970s, the Commission, acting on the authority given to it by the ACRA, began to promulgate rules “to provide a greater degree of tuning comparability for VHF and UHF signals.”³⁴ In fact, one of the steps the FCC took under ACRA was a maximum UHF noise figure. Thus, contrary to CEA’s contention at pages 14-15, maximum receiver performance requirements are, in fact, authorized under ACRA.³⁵ ACRA remains in force today and its plain meaning conveys to the Commission authority upon which it can base technical performance thresholds so that DTV receivers can acquire and maintain DTV signals.

³¹ Moreover, the applicability of the plain language of a statute is not negated in later and unanticipated circumstances. If a later situation is covered by the plain language of a statute, the statute is applicable, irrespective of whether the situation was contemplated by Congress in passing the statute. *See National Organization for Women, Inc. v. Scheidler*. *See, e.g. Louisiana Public Service Comm’n v. FCC*, 476 U.S. 355 (1986).

³² Comments of Thomson at 17.

³³ First Report and Order, *All Channel Television Receiver Rules (All Channel Act)*, Docket No. 14760, 27 Fed. Reg. 11698 (November 28, 1962).

³⁴ Report and Order, *In re Review of the Commission’s Regulations Governing Television Broadcasting*, 10 FCC Rcd. 4538, MM Docket No. 91-221 (March 7, 1995) at ¶ 20.

³⁵ *See* Comments of Joint Broadcasters at 24.

To date, the Commission has been reluctant to mandate any type of receiver standard because it prefers to rely on marketplace forces.³⁶ But at this point, the Commission must conclude that reliance on the receiver marketplace alone has been misplaced.

B. The FCC Should Establish Minimum Performance Thresholds To Ensure That DTV Sets Can Adequately Receive DTV Signals.

CEA, Thomson and Philips appear to be suggesting throughout their comments that the FCC should happily permit manufacturers to offer DTV receivers that don't in fact adequately receive DTV signals in a variety of real world situations. All receivers on the market today, for example, are experiencing problems with indoor reception, especially in densely built-up areas. Surely, this position the Commission should not endorse. Minimum base line performance levels will instill consumer confidence in all DTV receivers *and* provide a base on which manufacturers can compete for further performance and functionality for varying consumer uses.

Manufacturers claim that mandatory minimum performance requirements would stifle competitive improvements.³⁷ But these commenters do not explain why and how competition would be dampened. Manufacturers further claim that the marketplace provides sufficient motivation for improved receiver performance.³⁸ Today's controversy over

³⁶ See, e.g. Fifth Report and Order at ¶¶ 112-114;. In considering whether to require NTSC tuners in DTV receivers, the Commission "expect[ed] that equipment manufacturers will make available to consumers digital receivers that receive both NTSC and DTV signals. However, we will not preclude equipment manufacturers from designing digital receivers that do not receive NTSC signals." Fifth Report and Order at ¶ 113. Manufacturers have in fact included NTSC tuners in DTV sets. But, as we noted in our initial comments, equipment manufacturers are designing digital sets that do not include a DTV tuner! To remedy this situation, and advance the digital transition, NAB in initial comments urged the Commission to require, again under the authority of ACRA, a DTV tuner in all new television receivers thirteen inches and greater in diagonal size. See NAB Initial Comments at 15.

³⁷ Comments of CEA at 15-16; Comments of Thomson at 18; Comments of Philips at 16.

insufficient multipath performance certainly belies that the marketplace alone will produce “working” receivers in the foreseeable future or on a timeline that will comport with Congressional deadlines for the final conversion to DTV and recovery of analog spectrum. Thomson’s product improvement “leapfrogging” argument³⁹ may work to produce continuously better product by enlightened consumer electronic manufacturers whose products may lead product development. However, the FCC should not permit consumers to unknowingly purchase inferior DTV receivers, as are on the market today. *Minimum* performance requirements will not harm the enlightened manufacturers but will provide the critical performance baseline in all marketed receivers to establish consumer confidence necessary to a speedy DTV transition. NAB simply fails to see how future improvements would in fact be hampered by baseline requirements, which manufacturers’ comments do not explain how or why baseline requirements hinder improvements.

Philips asserts that DTV receivers expected performance cannot be reliably predicted and thus matched by performance requirements.⁴⁰ NAB believes that many of today’s problems with inadequate reception can be ameliorated by requiring receivers to match the performance characteristics assumed in the FCC’s allotment/assignment planning factors. These include receiver noise figures and adjacent channel, co-channel, and taboo channel immunities. The more complex multipath situations will take more examination to define and match with performance expectations for receivers.

Manufacturers point out that historically the FCC has eschewed receiver requirements of

³⁸ *Id.*

³⁹ Comments of Thomson at 18.

⁴⁰ Comments of Philips at 16.

any type, preferring to rely on market forces to produce consumer products.⁴¹ However, as NAB said in introducing its initial comments in this proceeding, this is not a marketplace transition. Here we have Congressional timelines for the DTV transition that cannot abide today's stalled marketplace that has produced insufficient receiver reception in many normal consumer environments.

III. CHANNEL SIX SHOULD CONTINUE TO BE USED FOR TELEVISION.

National Public Radio (NPR) in its comments supports the reallocation of the 82-88 MHz spectrum to digital audio broadcasting (DAB).⁴² As NAB pointed out in our comments in the Digital Audio Broadcasting proceeding,⁴³ this spectrum is currently occupied by TV channel 6 and it would not be feasible for the Commission to consider such reallocation of spectrum. First, many existing broadcasters operating on channel 6 in analog NTSC are expecting to switch their DTV operation to channel 6 when the analog service is terminated. Second, it is highly unlikely that this 6 MHz of spectrum could accommodate all existing radio stations. Third, the earliest this spectrum would be available is 2007. We remind the Commission that a DAB solution for radio broadcasters using the existing 88-108 MHz FM broadcast band has been under study for the past 10 years and is currently in the final stages of development and testing. It is expected that In Band, On Channel ("IBOC") DAB should be ready for service roll-out in 2001, making the need for additional DAB spectrum unnecessary.

⁴¹ Comments of CEA at 14; Comments of Thomson at 19.

⁴² Comments of NPR, MM Docket No. 00-39, May 17, 2000 at 2.

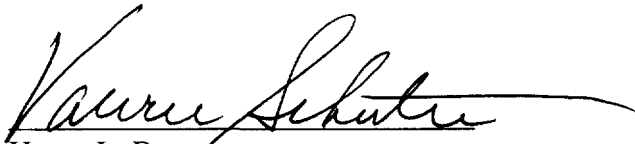
⁴³ Comments of NAB, MM Docket No. 99-325, January 24, 2000 at 5. Freedom Communications, Inc. also filed comments urging retention of channel six for television

IV. CONCLUSION

For the fore-going reasons and those presented by NAB and Joint Broadcasters, the Commission should address the lagging DTV transition by stepping in with strong, decisive action. It should, forthwith, mandate cable/DTV inter-operability standards, DTV must carry, minimum receiver performance thresholds and require every new television sold to include a DTV tuner.

Respectfully submitted,

**NATIONAL ASSOCIATION OF
BROADCASTERS**

A handwritten signature in black ink, appearing to read "Valerie Schulte", with a long horizontal flourish extending to the right.

Henry L. Baumann
Jack N. Goodman
Valerie Schulte
Ann Zuvekas

June 16, 2000

ATTACHMENT A

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Compatibility Between Cable Systems)	PP Docket No. 00-67
And Consumer Electronics Equipment)	
)	

**COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS
AND
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.**

**NATIONAL ASSOCIATION OF
BROADCASTERS**

**ASSOCIATION FOR MAXIMUM
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May 24, 2000

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EXECUTIVE SUMMARY

The National Association of Broadcasters (NAB) and the Association for Maximum Service Television (MSTV) jointly file these comments regarding the issues raised in the Commission's *Notice* seeking "to resolve outstanding issues regarding the compatibility of cable television systems, digital television receivers, set-top boxes, and other equipment used by consumers." While the *Notice* recites that the Commission has "encouraged and facilitated" negotiations between the cable and consumer electronic industries, today, three years after the DTV transition was initiated by the FCC, there is *no* DTV/cable inter-operable product. That means, there is no DTV receiver available on the market that will work with digital cable. Nor is there any prospect that there will be DTV/cable inter-operable product in the short or medium term.

Today, consumers who subscribe to cable (67 percent of all TV households) *cannot* access digital cable services through a DTV receiver. Today (and for the next year or two), DTV sets that consumers might buy *will never* work properly with digital cable. There should be no reluctance on the Commission's part to step in for the benefit of consumers. Inter-operable products are *vital* to the DTV transition.

For more than ten years, NAB and MSTV have urged the Commission to mandate a resolution to the DTV/cable inter-operability problems so that consumers interested in receiving DTV over cable and in connecting DTV receivers with a range of digital peripherals will be able to do so. The Commission has put off dealing with this issue.

Moreover, the digital "cable ready" solution this *Notice* focuses on is the *subject only of incomplete agreements, unfinished standards and no mandate for product*. The Commission

must require that the three basic steps in product development be completed for consumer digital “cable ready” DTV equipment to be available to consumers as soon as possible. These steps are:

- 1) a complete agreement must be reached on each parameter of a digital “cable ready” receiver;
- 2) precise standards must be established that enable each industry to produce digital product that is inter-operable with the other’s product; and 3) these precise standards must be implemented in digital “cable ready” products.

Each of these steps must be completed for each of the four outstanding major compatibility issues identified in the *Notice* (RF interconnection, program system information protocol (PSIP), copy protection and labeling of equipment). The cable and consumer electronics industries have made varying degrees of progress toward completion of the three basic steps (agree, define and implement) – but for none of the four issues have they completed all three steps.

Thus, the Commission must *immediately* mandate standards (both for the near term and the long term) in order to solve the problems of getting a DTV signal through a cable system to the consumer. Specifically, the FCC must *immediately* mandate IEEE 1394/5C interfaces for all DTV sets and set-top boxes (STB) for today’s STB environment. It must then proceed to force *immediate* completion of the agreements and standards for direct connection of cable systems with DTV sets (digital “cable ready”) and then mandate that direct connection DTV receivers be built to those standards. Perhaps then, the DTV transition that Congress wants completed in 2006 can begin in earnest.

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Compatibility Between Cable Systems)	PP Docket No. 00-67
And Consumer Electronics Equipment)	
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**COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS
AND
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.**

I. INTRODUCTION

The FCC has “reluctantly” issued a *Notice of Proposed Rule Making* on cable /DTV inter-operability seeking “to resolve outstanding issues regarding the compatibility of cable television systems, digital television receivers, set-top boxes, and other equipment used by consumers”¹ The National Association of Broadcasters (NAB)² and the Association For Maximum Service Television, Inc. (MSTV)³ hereby comment on the digital inter-operability issues that *should have been resolved and mandated years ago by the FCC*. It disappoints us, and should dismay policymakers and consumer advocates, that the FCC is today, at long last, still reluctant to take action in the

¹ *Notice of Proposed Rule Making*, In the Matter of Compatibility Between Cable Systems and Consumer Electronics Equipment, PP Docket No. 00-67, at ¶ 1 (released April 14, 2000) [hereinafter *Notice*].

² NAB is a nonprofit incorporated association of radio and television stations and broadcasting networks. NAB serves and represents the American broadcasting industry.

³ MSTV is a nonprofit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the local broadcast system.

arena of digital inter-operability. The FCC's public pronouncements that it would rely on marketplace forces to ensure consumers' ease of use and access to new digital content have had disastrous results.

Today, three years after the DTV transition was initiated by the FCC, there is *no* DTV/cable inter-operable product. That means, there is no DTV receiver available on the market that will work with digital cable. Nor is there any but the most remote prospect that there will be DTV/cable inter-operable product in the short or medium term. Today, three years after the Commission ordered broadcasters to begin airing DTV signals and the Congress set deadlines for an early end to the DTV transition and recovery of analog spectrum,⁴ consumers who subscribe to cable (67 percent of all TV households) *cannot* access digital cable services through a DTV receiver. Today (and for the next year or two), DTV sets that consumers might buy *will never* work properly with digital cable. There should be no reluctance on the Commission's part to step in for the benefit of consumers.

The *Notice* recites that the Commission has "encouraged and facilitated" the negotiations (on inter-operable digital products) between the cable and consumer electronics industries, "in the hope and belief that comprehensive market-driven solutions were attainable and would be superior to a regulatory approach."⁵ The *Notice* goes on to

⁴ Eighty-five percent of the television households in a market must be able to receive all local DTV transmissions, either over-the-air or through a cable or satellite service provider, before NTSC spectrum in that market may be reclaimed by the Government, which Congress wants to accomplish by 2006. *Memorandum Opinion and Order on Reconsideration of the Fifth Report and Order*, MM Docket 87-268, adopted February 17, 1998 at fn. 142.

⁵ *Notice* at ¶ 3.

say that “[w]e are concerned that further delay in resolving these [two critical unresolved matters] could begin to have deleterious effects on the deployment of a universe of products and services that will benefit the American public and, indeed, delay the implementation of DTV.”⁶ In fact, inter-operable products are *vital* to the DTV transition.

For more than ten years, NAB and MSTV have urged the Commission to force or mandate a resolution to the DTV/cable inter-operability problems so that consumers interested in receiving DTV over cable and in connecting DTV receivers with a range of digital peripherals will be able to do so, thereby moving the DTV transition towards completion.⁷ The Commission has put off dealing with this issue, first promising to issue

⁶ *Id.*

⁷ See, e.g., Joint Broadcaster Comments, *In re Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, MM Docket 87-268, at 18-20 (Nov. 30, 1988); Joint Broadcaster Comments, MM Docket 87-268, at 38-39 (Nov. 20, 1995); Joint Broadcaster Comments, MM Docket No. 87-268, at 19-21 (Jan. 22, 1996); Joint Broadcaster Comments, MM Docket No. 87-268, at 26-27 (July 11, 1996); Comments of MSTV, *Notice of Proposed Rulemaking, In re Carriage of the Transmissions of Digital Television Broadcast Stations, Amendment of Part 76 of the Commission's Rules*, CS Docket No. 98-120 (Oct. 13, 1998); Comments of NAB in CS Docket No. 98-120 (Oct. 13, 1998); Reply Comments of MSTV in CS Docket No. 98-120 (Dec. 22, 1998); Reply Comments of NAB in CS Docket No. 98-120 (Dec. 22, 1998); Comments of MSTV in Partial Support of the Petition for Reconsideration of the Consumer Electronics Manufacturers Association and In Partial Opposition to the Petitions for Reconsideration of Time Warner Entertainment Company and the National Cable Television Association Inc., CS Docket No. 97-80 (Sept. 23, 1998); *Ex Parte* Notice of MSTV in CS Docket No. 97-80 (May 21, 1998); *Ex Parte* Notice of MSTV and NAB in CS Docket No. 97-80 (May 28, 1998); Letter From Victor Tawil, MSTV and Henry L. Baumann, NAB, to William E. Kennard, Chairman, FCC in CS Docket No. 98-120 (June 4, 1998); Letter from Victor Tawil, MSTV, to William E. Kennard, Chairman, FCC in CS Docket No. 98-120 (Sept. 16, 1998) (urging completion of 1394 specifications by the November deadline and reminding the Commission that 1394 is just one of many specifications that need to be resolved); Letter from Margita E. White, MSTV, and Edward O. Fritts, NAB, to William E. Kennard, Chairman, FCC in CS Docket No. 98-120 (November 10, 1998) (urging FCC oversight over the completion of standards-setting and the implementation of STV-receiver inter-operability); Statement of

a rulemaking in 1994⁸, then delaying, and then in 1998 abdicating its regulatory authority for a largely ineffectual cajoling role.⁹

Having reduced its role in the digital inter-operability saga to little more than monitoring industry progress, in 1998 the Commission focused on the IEEE 1394 interface. In response to weak and sporadic FCC pressure on the interface issue, cable and set manufacturers have sent letters *promising* to take action, *assuring* that resolution on the interface standard was in the offing, and assuring even that such *product* was close at hand.¹⁰ The Commission even held a hearing on DTV inter-operability in May

Victor Tawil, MSTV, May 20 FCC Roundtable on DTV Compatibility with Cable and Other Video Distribution Services (May 20, 1999); Statement of Lynn Claudy, NAB, May 20 FCC Roundtable on DTV Compatibility with Cable and Other Video Distribution Services (May 20, 1999); Letter from Margita E. White, MSTV, to William E. Kennard, Chairman FCC in CS Docket No. 98-120 (July 22, 1999) (noting that the promises to the FCC in the wake of the Compatibility Roundtable fell far short of the FCC's expectations); MSTV Report on DTV Implementation, CS Docket No. 98-120 (Oct. 8, 1999) (cataloging the inter-operability problems); Letter from Margita E. White to the Hon. W.J. Tauzin, Chairman, House Subcommittee on Telecommunications, Trade and Consumer Protection (Dec. 2, 1999); Letter from Edward O. Fritts, NAB, and Margita E. White, MSTV to Commissioner Ness (Dec. 20, 1999) (commenting on Dec. 10 inter-operability meeting and the unending inter-operability deliberations); Letter from Margita E. White to William E. Kennard, Chairman FCC (March 6, 2000) (expressing disappointment with the NCTA-CEA agreement). NAB and MSTV even took advantage of a Senate hearing on the transition to DTV to zero-in on and put front and center the cable/DTV inter-operability problem and to demand resolution. *See also The Transition to High Definition Television: Hearings Before the Senate Comm. on Commerce, Science and Transp.*, 105 Cong. 2d Sess. (July 8, 1998) (statement of Gregory M. Schmidt, Vice President, LIN Television Corporation).

⁸ *See* Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992, First Report and Order, ET Docket No. 93-7, 9 FCC Rcd. 1981, 2005 (1994).

⁹ *See* Letter from William E. Kennard, Chairman, FCC to Decker Anstrom and Gary Shapiro (August 18, 1998).

¹⁰ Although the Commission appeared firm in its urgings that the cable and consumer electronics industries resolve these issues, it accepted half-loaf responses. *See*

of 1999, where there was a virtually unanimous chorus of cable, manufacturing, content and broadcast witnesses endorsing the IEEE 1394/5C digital interface as the practical solution to cable/DTV inter-operability for today's set-top box environment. And, still, in May 2000, we have no IEEE 1394 DTV product.

The Commission lauds the cable and consumer electronics industries for having attempted agreement on specifications for a cable-ready set,¹¹ even before they have deployed IEEE 1394 interfaces for today's set-top box environment, but the digital "cable-ready" solution this *Notice* focuses on is the subject *only of incomplete agreements, unfinished standards and no mandate for product*. The Commission overstates the degree to which progress has really been made on longer-term inter-operability solutions (even while the immediate need for IEEE 1394 product goes unmet). It should take immediate steps to ensure that there is increased public comment and participation in the formulation of a cable-ready solution, as well as a mandated timetable for completion of cable-ready specifications.

Thus, NAB and MSTV, after years of similar demands and no results, again call on the FCC to take off its blinders, realize that its inaction has directly contributed to the sorry array of DTV consumer equipment available today, and mandate strong inter-

Letter from Gary, Shapiro, CEMA to William E. Kennard, Chairman, FCC (October 30, 1998) (claiming victory for the digital interface, IEEE 1394, but leaving the required copy protection piece undone. The agreement on all necessary components including copy protection, IEEE 1394 interface is still incomplete. See Letter from William E. Kennard, Chairman, FCC to Decker Anstrom, NCTA and Gary Shapiro, CEMA (August 13, 1998); Letter from Decker Anstrom, NCTA to Kennard, Chairman, FCC (August 26, 1998); Letter from Gary Shapiro, CEMA to William E. Kennard, Chairman, FCC (September 10, 1998); Letter from Decker Anstrom, NCTA and Gary Shapiro, CEMA to William E. Kennard, Chairman, FCC (October 30, 1998). The FCC continues to applaud half-measures while month after month of the DTV transition go by.

¹¹ *Notice* at ¶ 12.

operability standards. As we discuss below, the FCC must *immediately* mandate IEEE 1394/5C interfaces for all DTV sets and set-top boxes for today's set-top box environment. It must then proceed to force *immediate* completion of the agreements and standards for direct connection of cable systems with DTV sets (digital "cable ready") and then mandate that such direct connection DTV receivers be built to these standards.

Even then, it will likely be *after* the 2001 holiday selling season, some time in 2002, that such "cable-ready" DTV sets will be on store shelves. If the FCC immediately mandates IEEE 1394/5C interfaces for all DTV sets (as of summer 2001), at least there will be an end to the cable-incompatible DTV sets as of that date (four years after the DTV transition began) and in time for the 2001 holiday selling season. Perhaps then, the DTV transition that Congress wants completed in 2006 can begin in earnest.¹²

II. THE FCC MUST IMMEDIATELY MANDATE IEEE 1394 DIGITAL CONNECTION FOR ALL DTV SETS AND SET-TOP BOXES.

IEEE 1394 is immediately needed for cable consumers to be able to get HDTV signals, cable and broadcast, from their digital cable set-top box to their DTV set. IEEE 1394 is also needed on all DTV product so that there will be a consumer-friendly, ubiquitous connector for all digital television devices, giving consumers the much-needed certainty that the digital sets and other digital products they buy will work with each

¹² NAB, in its comments on the DTV Biennial Review filed last week, calls for the FCC to mandate that *every* TV set sold, analog or digital, be equipped with a DTV tuner, which NAB believes is the kind of dramatic action necessary to get the DTV transition back on the course set by Congress and the Commission. See NAB Comments, MM Docket No. 00-39, filed May 17, 2000. MSTV joins with NAB in calling for this action.

other. The need for the IEEE 1394 connection was obvious as many as three years ago. The Commission relied on the marketplace to ensure that the interface was installed in consumer hardware with all deliberate speed. But that did not happen. It did not happen because agreement on all the necessary layers of the IEEE 1394 specification has been held up by quarrels among content providers, the cable industry, and receiver manufacturers over copy protection technologies and licensing terms.¹³ Consumers do not seem to be clamoring for IEEE 1394 connections; they simply are not buying digital receivers because of the premature obsolescence and limited utility built into those receivers. This, then is the state of affairs. The market has not worked to speed provision of a short-term inter-operability solution and the Commission has failed to step into the vacuum.

A. The FCC Has Authority to Mandate Standards.

The *Notice* asks whether certain portions of Section 624A of the Communications Act, 47 U.S.C. §544A, prevent the Commission from adopting digital inter-operability standards such as the ones proposed herein.¹⁴ They do not. Section 624A is directed at the problems of analog cable inter-operability. The provisions the *Notice* references (Sections 544A(a)(4), and (c)(2)(D)) were added by Section 301(f) of the Telecommunications Act of 1996, otherwise known as the Eshoo Amendment. This Amendment was directed at the Commission's ongoing rulemaking on analog cable

¹³ See *Notice* at ¶ 20. See also Letter from Robert S. Schwartz to Magalie R. Salas, Federal Communications Commission, Office of the Secretary (Feb. 2, 2000) in CS Docket No. 97-80; Letter from Richard R. Green to Magalie R. Salas, Federal Communications Commission, Office of the Secretary (Feb. 16, 2000), in CS Docket 97-80.

¹⁴ See *Notice* at ¶ 9.

equipment compatibility and, specifically, at the possible impact of the FCC's 1994 proposal for a decoder interface standard on home automation equipment and services.¹⁵ As the Commission has already found in another proceeding, the amended language of Section 624A, by its terms, applies only to rules required or prescribed by Section 624A (that is, to the analog cable compatibility rules).¹⁶ Even if Section 624A did govern the Commission's consideration of a mandatory IEEE 1394 interface standard, mandating such a standard would easily pass the test imposed by that Section. There appears to be a consensus that a IEEE 1394 connection is the minimum degree of common design necessary to ensure compatibility and, rather than impairing competition among other equipment features, the connection actually allows competition in other features to flourish.¹⁷ That is, once the basic connection has been resolved, equipment manufacturers can differentiate their products based on other offerings. Furthermore, the IEEE 1394 connection does not in any way impair the specific functions enumerated in 47 U.S.C. § 544a(c)(1)(B) (recording off-channel, taping consecutively on two different channels, and picture-in-picture).

¹⁵ See, e.g., Statement of Representative Eshoo, 142 Cong. Rec. 1145, 1161 (Feb. 1, 1996). See also Communications Act of 1995, H.R. Rep. No. 104-204, 104th Cong., 1st Sess. (111) 1996.

¹⁶ *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, CS Docket No. 97-80, Report and Order, 13 F.C.C.R. 14775, 14804 (1998); Order on Reconsideration, 14 F.C.C.R. 7596 (1998), *appeal pending sub. nom. General Instrument Corporation v. FCC*, No. 98-1420, (D.C. Cir.). MSTV and NAB were active participants in this docket, see, e.g., Comments of MSTV in Partial Support of the Petition for Reconsideration of the Consumer Electronics Manufacturers Association and In Partial Opposition to the Petitions for Reconsideration of Time Warner Entertainment Company and the National Cable Television Association Inc., CS Docket No. 97-80 (Sept. 23, 1998), and MSTV intervened on the side of the FCC in the appeal.

¹⁷ One could ask for significantly more, including RF and analog baseband connections.

B. IEEE 1394

As discussed above, IEEE 1394 has long been the acknowledged immediate solution to get DTV signals (cable *and* broadcast, particularly HDTV signals) from the cable set-top box into DTV sets. Without readily available IEEE 1394 connections, the DTV transition is stopped in its tracks at the consumer end because the 67 percent of TV households that are cable subscribers have little or no incentive to buy a DTV set. And, of course, without consumers purchasing DTV sets in large numbers there will be no DTV transition.¹⁸ Any consumer that has purchased a DTV set thus far, and any that purchases one currently on the shelves, owns or will own an expensive piece of equipment that *will never work properly with cable*.

While direct connection-to-cable (digital "cable-ready") DTV sets are a desirable consumer goal, they are far away from being offered in the marketplace. Even if digital cable-ready sets were available today, consumers would still want to be able to connect those sets to other digital devices, like digital VCRs, through a digital pipe. And, importantly, as a matter of practical reality, set-top boxes will be used by consumers now and well into the future. The IEEE 1394 connector is necessary for the set-top box DTV environment today, and the digital inter-connected environment of tomorrow. The cable industry *has* standardized IEEE 1394/5C and IEEE 1394-equipped set-top boxes and some MSOs are expected to deploy them later this year. The FCC must act immediately to mandate the IEEE 1394 interface on all DTV receivers, and all digital set-top boxes or

¹⁸ We recognize that consumers can buy digital decoders in order to receive DTV signals on analog sets, but it is the viewing of DTV signals on DTV receivers in full digital quality that is expected to give consumers the greatest incentive to make the digital conversion.

DTV equipment that is not inter-operable will continue to be offered while the DTV transition continues to languish.

C. IEEE 1394 Copy Protection

While the affected industries theoretically settled on IEEE 1394 as the baseband digital interconnection some time ago,¹⁹ it appears that deployment of IEEE 1394 product cannot occur without standardized copy protection technology for the IEEE 1394 link.²⁰ And, while at the May 1999 FCC hearing on DTV inter-operability, there was a near unanimous agreement that the "5C" copy protection technology was certain to be *the* copy protection method to be used,²¹ the lack of standardization of 5C by the consumer electronics industry as well as concerns of copyright owners over licensing terms has stymied the addition of 5C to IEEE 1394 product. And another year has passed.

NAB and MSTV have long said just "get it done." We say so again. The FCC must step in to force action and mandate standards so inter-operable product will be built. We do urge the FCC, however, to require that the owners of any copy protection technology must not, in licensing that technology, adopt a blanket ban against use in any

¹⁹ See Letter from CEA and NCTA to William E. Kennard, Chairman, FCC (October 30, 1998).

²⁰ In fact, NAB and MSTV believe that the lack of certainty that IEEE 1394 itself would in fact be the anointed connector has been as much to blame for the non-implementation of IEEE 1394 as the missing copy protection piece. For any technical standard to be confidently deployed in products, the FCC blessing or mandate seems necessary. Without it, manufacturers cannot be sure enough to devote their product production lines to an "expected" winner technology.

²¹ *DTV Inter-operability Roundtable: Hearings Before the Federal Communications Commission* (May 20, 1999).

particular distribution environments.²² The same applies to the use of 5C in the cable-ready, direct connection environment, where 5C, among other unfinished issues, is dragging out completion of mere agreements. Actual standards, much less implementation of digital "cable-ready" DTV sets are still out of reach. In the area of copy protection -- a critical ingredient of the digital interface between set-top boxes and DTV receivers -- the FCC has relied on endless industry negotiations, with no real stick to force a conclusion in the public interest. It has also naively assumed that agreements will instantly mean products on the store shelves. Nothing could be farther from the truth.

III. THE FCC MUST FORCE EACH STEP ALONG THE PATH TO DEPLOYMENT OF DIRECT CONNECTION (CABLE-READY) DTV SETS.

The only way to provide consumers with the assurance that the DTV sets they may buy will work with cable (and the only way to reach the 85 percent DTV receiver penetration mark even close to the 2006 deadline) is for the Commission to mandate cable inter-operability through immediate deployment of IEEE 1394 for the set-top box environment, as discussed above, and by defining and requiring all components of the digital "cable ready" direct connection alternative.

The Commission must require that the three basic steps in product development be completed for consumer digital "cable ready" DTV equipment to be available to consumers as soon as possible. These steps are: 1) a complete agreement must be

²² See Letter from Margita E. White, MSTV to Hon. W.J. Tauzin, Chairman, House Subcommittee on Telecommunications, Trade and Consumer Protection (December 2, 1999).

reached on each parameter of a digital “cable ready” receiver; 2) precise standards must be established that enable each industry to produce digital product that is inter-operable with the other’s product; and 3) these precise standards must be implemented in digital “cable ready” products.

Each of these steps must be completed for each of the four major compatibility issues identified in the *Notice* (RF interconnection, program system information protocol (PSIP), copy protection and labeling of equipment).²³ The cable and consumer electronics industries have made varying degrees of progress toward completion of the three basic steps (agree, define and implement) – but for none of the four issues have they completed all three steps.

One of the shadows cast on the entire industry negotiation process on which the FCC has utterly relied is that the process has been closed to broadcasters and other affected parties. The cable, equipment manufacturing and content creating industries all have an interest in seeing progress made on digital inter-operability, but none has the pressing interest that broadcasters (and consumers) have in making DTV take off quickly. The Commission, acting in the public interest and consistently with its DTV policy, must take steps to make the inter-operability negotiations more transparent to the public and hold the relevant industries to greater accountability.²⁴

A. RF Interconnection

With regard to the RF interconnection, the agreement announced by CEA and NCTA on February 22, 2000 outlines the critical features of the hardware connection

²³ *Notice* at ¶ 3.

between a cable system and a digital "cable ready" receiver.²⁵ Thus, with respect to the RF interconnection, the two industries have completed step one (the agreement phase) in the process of bringing digital "cable ready" receivers to market. Unfortunately, not only have they not completed step two (the standards definition phase), but they have created two *separate* RF interconnection standards for their respective industries. At least in draft form, these two standards are not fully compatible with each other. If the final versions of these two standards are not made compatible, the rollout of digital "cable ready" consumer receivers will be further delayed.

To solve the problem of potentially warring and incomplete standards, the Commission must adopt a single RF interconnection standard for digital "cable ready" receivers, just as it did for analog cable ready equipment.²⁶ In principle, it makes no difference to broadcasters whether the Commission adopts the CEA (EIA) version of this standard or the NCTA (SCTE) version. But the Commission must mandate a single version for use by DTV set manufacturers and cable equipment manufacturers in order to ensure compatibility. As discussed above, the Commission should have no doubts on its authority to take this action.

²⁴ See Joint Broadcasters Comments, MM Docket No. 00-39 (filed May 17, 2000) at 27, calling for public comment.

²⁵ See Letter from Robert Sachs, President and CEO, National Cable Television Association, and Gary Shapiro, President and CEO, Consumer Electronics Association, to William E. Kennard, Chairman, Federal Communications Commission (February 22, 2000) at Appendix 1 [hereinafter *NCTA/CEA Feb.2, 2000 Letter*].

²⁶ 47 C.F.R. § 15.118.

B. Program and System Information Protocol (PSIP)

While the CEA-NCTA RF interconnection agreement²⁷ is complete (even though the standards to implement it are not), the PSIP agreement announced on February 22, 2000²⁸ is not. The two organizations acknowledge this in their agreement by noting that “further work is needed on detailed aspects of the implementation.”²⁹ Thus, before digital “cable ready” receivers can make it to market, this agreement must be completed, the necessary technical standard for implementing it must be adopted and equipment that complies with this standard must be manufactured. Here again, the Commission must establish quick deadlines for completing the standard and implementation.

C. Copy Protection

The affected industries are even farther from completing any agreement on copy protection technology to be used in the digital “cable ready” circumstance. As discussed in Section II, the Commission must force completion of a single standard for copy protection including a prohibition of a blanket ban against use in any particular

²⁷ With respect to the PSIP agreement, NAB and MSTV take strong exception to (1): the limitation of the bandwidth of the PSIP program related bit stream in requirement 3 (because broadcasters’ PSIP data may take more than the approximately ten percent of the A/65 capacity allotted, and the entire broadcast stream should be carried, not a cable-selected part), (2) the special exception for the carriage of the analog TSID (because the operation of the PSIP in the DTV signal should not be tied to an analog signal which may not be present (unless the FCC takes action on mandating A/65)) and (3) possible changing of a broadcasters’ channel number (because NAB and MSTV do not agree that cable systems have the right to re-number/re-brand a broadcaster’s channel). *See NCTA/CEA Feb. 2, 2000 Letter* at Appendix 2. These PSIP content/policy matters should be addressed when the agreement is put out for comment.

²⁸ *NCTA/CEA Feb. 2, 2000 Letter* at Appendix 2.

²⁹ *Id.* at 1.

distribution environment. If the 5C technology does not meet the needs of the content community, then the Commission must force agreement on a practical alternative, but do so with dispatch. This issue cannot be allowed to further delay cable/DTV inter-operability and the DTV transition.

D. Labeling

In order to assure consumers that the digital "cable ready" DTV receivers they purchase will work with digital cable transmissions, the Commission must establish criteria for labeling a DTV receiver as digital "cable ready." This was appropriate for analog TV sets³⁰ and is likewise appropriate with digital "cable ready" receivers. To ensure consumer confidence that a digital "cable ready" set will work with cable in a variety of real world cable system scenarios, digital "cable ready" receivers should include the IEEE 1394 interface. This is necessary if we are to even approach the 2006 DTV receiver penetration goal for the end of the transition and the recovery of the spectrum. Thus, the Commission must include in the definition of a digital "cable ready" set an IEEE 1394 interface *as well as* standards for RF interconnection, PSIP, and copy protection.

IV. CONCLUSION

The *Notice* in this proceeding asks more questions than it proposes solutions. But the time for asking questions with regard to cable/DTV inter-operability is long past. For the foregoing reasons, NAB and MSTV urge the Commission to immediately require

³⁰ 47 C.F.R. §15.118.

IEEE 1394 on all DTV receivers and digital cable set-top boxes, effective no later than summer 2001. We also urge the Commission to force immediate resolution by the cable and consumer electronics industries on the remaining issues concerning digital "cable ready" receivers and then to proceed to notice, seek comment and adopt forthwith mandatory standards for digital "cable ready" receivers.

Respectfully submitted,

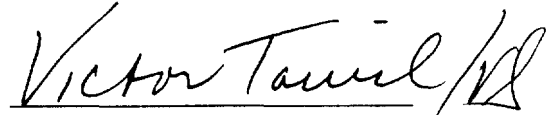
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May 24, 2000